Patent Cooperation Treaty
International Searching Authority– ISA/US

Applicant:	Michael J. Hulin
Int'l. App. No.:	PCT/US05/04811
Int'l. Filing Date:	16 February 2005 (16.02.05)
Title of Invention:	AUTOMATED APPARATUS AND SYSTEM FOR COOKING, DRYING, PEELING AND PROCESSING SHELLFISH PRODUCTS

RESPONSE TO WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

Mail Stop PCT
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Commissioner for Patents
PO Box 1450
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Sir:

In response to the Written Opinion dated 19 December 2005 for which a reply period of three (3) months ending 19 March 2006 was set, please replace present pages 22 – 38 of the claims with replacement pages 22 – 39. The replacement pages include amendments to claims 1 – 91 as described hereinbelow.

EXPLANATION OF DIFFERENCES BETWEEN THE CLAIMS AS FILED AND THE CLAIM AMENDMENTS PRESENTED HEREWITH

Claim 1 is amended to include the limitations of originally filed claims 2 – 4. This amendment is in response to the indication in the Written Opinion that claim 4 has industrial applicability, is novel and includes an inventive step. Support for this amendment can be found throughout the application and drawing figures.

Claim 2 is replaced with new claim 2 which is dependent on amended claim 1. New claim 2 further defines the apparatus of claim 1 and includes "means for retaining the shellfish product, wherein said means for retaining shellfish product includes at least one of a crate and a container, and wherein said means for automatically transporting

product removes said retaining means therefrom upon said product being dumped from said retaining means into said conk tank". Support for this amendment is found throughout the specification and the originally filed claims.

Originally filed claims 5 – 93 have been renumbered as claims 3 – 91 and all dependencies contained therein have been amended accordingly. Additionally, renumbered claims 3 – 91 have been formally amended for purposes of clarity and to ensure uniformity between terms contained throughout the claims. Specifically, the claims were formally amended to replace the phrase "shellfish products" with the phrase "shellfish product". Additional formal amendments have been made in renumbered claims 3 – 91. Applicant respectfully submits that these formal amendments are supported by the originally filed claims and throughout the specification and drawing figures.

Renumbered claim 25 is amended to remove the term "orbital motion" therefrom.

Applicant further respectfully submits that no new matter is added by any amendments made to the amended claims on replacement sheets 22 – 39 submitted herewith.

REMARKS

Claim 4 has been indicated as meeting the criteria set out in PCT Article 33(2)-(3) as being novel and including an inventive step because the prior art does not teach or fairly suggest the featured claimed therein. In response to this indication, claim 1 has been amended to include the features of claims 2 – 4. Therefore, amended claim 1 is considered to have industrial applicability as well being both novel and including an inventive step. Renumbered claims 2 – 47 and 73 – 77 are dependent on claim 1. Therefore, Applicant respectfully submits that claims 2 – 47 and 73 – 77 are novel and include an inventive step and thus meet the criteria of PCT Article 33(2) – (3).

Claims 80 – 86 (renumbered claims 78 – 84) have been indicated as meeting the criteria set out in PCT Article 33(2)-(3) as being novel and including an inventive step because the prior art does not teach or fairly suggest the featured claimed therein.

Objection to the Drawings

The drawings have been objected to under PCT Rule 66.2(a)(iii) for failing to show the "spiral platform with cylindrical chute" as claimed in claim 27 (renumbered claim 25). Applicant respectfully disagrees and respectfully submits that the above feature of claim 25 is shown in the drawings as filed. Specifically, the claimed feature is shown in Figure 6, reference numeral 98 and in Figure 8c, reference numerals 152 and 154. Furthermore, the corresponding description of these Figures contains support that sufficiently describes the drawings such as to show the feature claimed in claim 30 of the present invention. Figure 6 describes the dryer 30 and its related components including a "conveyor causing product 18 to be dumped from the upper level of the chute to the lower level" (see page 27, lines 10-12 of the specification). Figure 8 further defines the dryer 30 as "a spiral conveyor dryer" that utilizes the chute to transfer product to different portions of the dryer 30 (see pages 28 – 30 of the present specification). Applicant respectfully submits that in view of the description contained in the present specification in conjunction with shown item 98 in Figure 6 and item 152/154 in Figure 8c, that the feature claimed in claim 25 is shown in the Drawings. Therefore, Applicant respectfully submits that this objection has been satisfied and should be withdrawn.

Objection to Claims

Claim 27 (renumbered claim 25) is rejected under PCT Rule 66.2(a)v) as lacking clarity because it is unclear how the spiral platform achieves orbital motion. Claim 30 is amended to remove any reference to "the orbital motion". Consequently, it is respectfully requested that this rejection is satisfied and should be withdrawn.

Rejection of the Claims

Claims 1, 45 – 47 and 50 – 53 are deemed to lack novelty under PCT Article 33(2) as being anticipated by US Patent 3,594,860 to Nelson et al.

The present claimed invention describes an apparatus for cooking, drying and peeling shellfish product. The apparatus includes a fluid filled conk tank for separating the shellfish product from packing ice, sea shells and other such large objects. A transport means automatically transports the product to the conk tank and dumps the shellfish product into the conk tank. A boiler system supplies heated brine and cooks the

shellfish product therein. The boiler system includes a brine mixing tank including means for introducing water therein and means for introducing salt therein to create a brine solution of a predetermined concentration in which the shellfish product is to be cooked. A primary seafood boiler retains brine obtained from the brine mixing tank and maintaining the brine at a constant, predetermined temperature. A conduit extends between the brine mixing tank and the primary seafood boiler for selectively transporting brine to the primary mixing tank. At least one auxiliary boiler is positioned in line with the conduit for heating the brine to the desired temperature and storing the brine therein until called for to replenish used brine that has been removed from the primary seafood boiler. A transferring means automatically transfers the shellfish product from the conk tank to the boiler system.

As discussed above, Amended claim 1 includes the features of claims 2 - 4 which were indicated as novel and including an inventive step thus satisfy the criteria of Articles 6 and 33 of the PCT. Consequently, Applicant respectfully submits the rejection of claim 1 has been satisfied and should be withdrawn.

Nelson discloses a system for mechanically shucking mollusks that includes an enclosed conveyor system whereby the mollusks are heated and the top of the shell is removed prior to eviscerating the mollusk. Applicant respectfully disagrees that Nelson anticipates the present invention as claimed in the amended claims.

Renumbered claim 48 (original claim 50) describes a "dumping cage for discharging crated seafood" including "means for receiving said crated seafood" and means for displacing the crate whereby the crate is up-ended discharging the contents" into a conk tank. Further, claim 48 provides "means for removing the crate from the receiving means". These features are neither disclosed nor suggested by Nelson.

With respect to renumbered claim 49 (original claim 51), the present claimed invention describes a product delivery apparatus for conveying crated seafood product to a conk tank including means for receiving said crated seafood product and means for elevating said crated seafood product to the upper rim of a conk tank. Applicant respectfully disagrees with the Examiner's assertion that Nelson anticipates the present claimed invention. Specifically, Nelson neither discloses nor suggests each feature claimed in claim 49. In fact, Nelson is concerned with individual pieces of seafood

and thus has no applicability to a system for "discharging crated seafood product" as in the present claimed invention. There is no enabling disclosure regarding "a crate" let alone "means for displacing a crate" so that the crate is "up-ended" to discharge "seafood product" as in the present claimed invention. Thus, Applicant respectfully submits that the present invention as claimed in renumbered claim 48 is novel in view of Nelson. Therefore Applicant respectfully submits that this rejection has been satisfied and should be withdrawn.

Nelson neither discloses nor suggests "means for receiving said crated seafood product" as claimed in renumbered claim 49 of the present invention. Additionally, Nelson neither discloses nor suggests a "means for elevating said crated seafood product to the upper rim of a conk tank" as claimed in renumbered claim 49 of the present invention. The Examiner cites the "individual tray 24" and the transport system shown in Figure 1 identified by reference numerals 14 – 28 of Nelson as anticipating these features. Applicant respectfully disagrees. Rather, the "tray 24" of Nelson, by virtue of the description as an "individual tray" is not concerned with "receiving said crated seafood product" as in claim 49 of the present invention. Instead, as stated in column 2, lines 45 – 49 of Nelson, tray 24 receives "a whole live scallop". This is NOT equivalent to "receiving said crated seafood product" as claimed in renumbered claim 49 of the present invention. Additionally, the tray 24 of Nelson travels along a conveyor 16 and disposes of the individual scallop directly into a water bath 52 in a tank 50 (See Nelson, Fig. 1 and corresponding description). The insertion of an individual scallop in a water bath is wholly unlike and unrelated to "elevating said crated seafood product to the upper rim of a conk tank" as claimed in renumbered claim 49 of the present invention. Therefore, Applicant respectfully submits that Nelson does not anticipate the "product delivery apparatus" of the present claimed invention. Consequently, Applicant respectfully requests the rejection of claim 49 under PCT Article 33(2) is satisfied and should be withdrawn.

Renumbered claim 50 (original claim 52) describes a system for delivering raw crated seafood product and discharging the product into a conk tank. The system includes a product delivery apparatus and a dumping cage for discharging the crated seafood into a conk tank. Similarly as described above with respect to renumbered claim 49, Nelson neither discloses nor suggests the present claimed invention. Specifically,

Nelson neither discloses nor suggests "a dumping cage for discharging said crated seafood into a conk tank" as claimed claim 50 of the present invention. As discussed above Nelson is merely concerned with an **individual seafood product** and not "crated seafood product" as claimed in renumbered claim 50 of the present invention. Additionally, there is no enabling disclosure of "a dumping cage for discharging seafood into a conk tank" as claimed in renumbered claim 50 of the present invention. Rather, Nelson uses a tray for moving an individual piece of seafood into a water bath. This is NOT equivalent to the system as claimed in renumbered claim 50 of the present invention. Consequently, Applicant respectfully requests that the rejection of claim 50 under PCT Article 33(2) is satisfied and should be withdrawn.

Renumbered claim 51 (original claim 53) describes a conk tank incorporating at least two of means for circulating water under pressure, means for testing the raw seafood product, means for agitating the contents of said tank, means to prevent passage of ice while transferring raw seafood product therefrom, a first sensor incorporated therein for detecting foreign substances and chemicals within the tank and a second sensor for measuring the salinity of the solution therein. Applicant respectfully submits that a "conk tank" with "at least two" of the claimed features is neither disclosed nor suggested by Nelson. Nelson merely utilizes a jet nozzle to eviscerate the scallop (see column 2,line 54 – 62). This is wholly unlike the present claimed invention and it is respectfully submitted that Nelson provides enabling disclosure of the present invention as claimed in renumbered claim 51. Consequently, Applicant respectfully requests that the rejection of claim 51 under PCT Article 33(2) is satisfied and should be withdrawn.

In view of the above remarks and amendments to the claims, Applicant respectfully submits that the present invention as claimed in claims 1 and 49 – 51 is novel in view of Nelson. Therefore, Applicant respectfully submits that this rejection has been satisfied and should be withdrawn.

As discussed above, renumbered claims 2 – 47 and claims 73 – 77 have been amended to be dependent on amended independent claim 1. Therefore, Applicant respectfully submits that claims 2 – 47 and 73 – 77 satisfy all of the criteria of Article

6 and Article 33 of the PCT. Thus, Applicant respectfully submits that the rejections identified in the Written Opinion are satisfied and should be withdrawn.

In view of all of the foregoing, including the enclosed amendments, it is believed that the Examiner's objections are overcome. A favorable International Preliminary Examination Report is believed to be in order and such action is respectfully requested.

CONCLUSION

In view of the above amendments and remarks, Applicant respectfully submits that pending claims 1–51 and 73 - 84, satisfy all of the criteria of Article 6 and Article 33, PCT.

In view of the attached Certificate of Mailing, Applicant respectfully submits that this response is timely.

Respectfully submitted,
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